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APR 20 2006

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PTO/SB/33 (07-05)

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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)	
I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number (571) 273-8300.		Application Number	Filed
on <u>4-20-2006</u> (6 SHEETS TOTAL)		<u>10/661,333</u>	<u>9-12-2003</u>
Signature <u>Larry K. Roberts</u>		First Named Inventor	
Typed or printed name <u>LARRY K. ROBERTS</u>		<u>Hanks</u>	
		Art Unit	Examiner
		<u>2876</u>	<u>Frech</u>
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.			
This request is being filed with a notice of appeal.			
The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the		<u>Larry K. Roberts</u>	
<input type="checkbox"/> applicant/inventor.		Signature	
<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)		<u>Larry K. Roberts</u>	
<input type="checkbox"/> attorney or agent of record. Registration number _____		Typed or printed name	
<input checked="" type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 <u>28464</u>		<u>(949) 250-6008</u>	
		Telephone number	
		<u>4-20-2006</u>	
		Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.			
<input type="checkbox"/> *Total of _____ forms are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**RECEIVED
CENTRAL FAX CENTER****APR 20 2006****PATENT
200313595-1****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:)
Hanks, Darwin) Art Unit: 2876
Serial No. 10/661,333) Examiner: FRECH, K. D.
Filed: September 12, 2003)
For: CALIBRATING FINE ACTUATOR)
USING A REFERENCE PATTERN)

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is a request for a pre-appeal brief conference pursuant to the pilot program set out at 1296 Off.Gaz.Pat.Office 67 (July 12, 2005). A notice of appeal from the final rejection of December 28, 2005 is being filed herewith. The claims are set out at pages 2-6 of the response to the final rejection filed February 13, 2006.

In the final office action mailed December 28, 2005, the Office has maintained the rejection under 35 USC 103, that Claims 1-19 are unpatentable over Bradshaw in view of Bruner. The rejection should be withdrawn, because neither Bradshaw nor Bruner, alone or in combination, disclose, teach or suggest all of the limitations of the rejected claims. Thus a prima facie case of obviousness has not been made.

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Claims 1-9:

Neither Bradshaw nor Bruner, alone or in combination, disclose, teach or suggest at least the following limitations:

" . . . scanning a reference pattern on a disc to create a table of coordinate data; and
calibrating the gain of a fine actuator based on the table of coordinate data."

as recited in Claim 1 and incorporated into dependent Claims 2-9. Indeed, the Office does not assert that Bradshaw describes these features. Nor does the Office assert that the secondary reference Bruner describes these features.

The Office does assert that Bradshaw discloses setting up a reference coordinate system on a disk, at 19:25 to 20:13, and that Bruner discloses at page 4 "computing various disk calibration parameters including current equations used to generate null currents that maintain the transducer of the drive, i.e. gain." However, the above-noted features of Claim 1 are not addressed in the final rejection, except at pages 3-4 of the final rejection, which asserts that "the polar coordinate system of the prior art meets the claimed element," i.e. "scanning a reference pattern on a disc to create a table of coordinate data."

The Office further asserts that "it would have been obvious... to combine the teachings of Bradshaw and Bruner," and that "this would result in a system in which a reliable boot of a disk was provided." Applicants respectfully disagree that this broad combination of teachings is proper in this case.

The assertion that the polar coordinate system of Bradshaw, used to convert image points from an image source to be printed into a polar-based representation of the image (abstract), meets the above-recited feature of Claim 1 ("...scanning a reference pattern on a disc to create a table of coordinate data"), is not supported by

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the reference. Bradshaw is concerned with converting a plurality of image points received from a source in rectangular coordinates into a polar-based representation of the image (Abstract). At page 16, line 27 to page 17, line 1, Bradshaw described the "polar data points" which "the buffer 506 may arrange . . . such that the firing block 506 may access" them are from a "polar based bit map" which was converted from a "rectangular based bitmap 518" by a rectangular to polar block." Bradshaw does not describe "scanning a scanning a reference pattern on a disc to create a table of coordinate data."

Bruner relates to a "storing calibration parameters on the disk of a hard disk drive." Page 1, lines 5-6. Bruner states that "[h]ard disk drives contain a magnetic disk which rotates relative to a transducer head." Page 1, lines 10-11.

The basis for the final rejection is that teachings of a reference concerning a radial printing system and method (Bradshaw) are properly combinable with teachings of a reference concerning factory calibration of servo parameters in a hard disk drive. The reasoning given in the final rejection does not support this combination of teachings. "Reliable boot of a disk" may be a function of Bruner, but it is not explained why such a purpose would apply to the radial printing system and method of Bradshaw. For this reason alone, a prima facie case of obviousness has not been established. The asserted combination is the product of prohibited hindsight reconstruction.

With respect to claims 2 and 4, neither Bradshaw nor Bruner discloses, teaches or suggests at least the following limitations:

" . . . generating a reflective signal based on the reference pattern . . . ";
as recited in claim 2;

" . . . calculating a radius from a duty cycle of a reflective signal generated from the reference pattern . . . "as recited in claim 4.

Nor do the applied references teach or suggest features of Claims 5-6. In fact, the final rejection does not even address these features, and so a prima facie case of obviousness has clearly not been established regarding Claims 2, 4 and 5-6.

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Claims 10-14:

The applied references also do not teach or suggest:

"... scanning a sawtooth pattern on a non-data side of an optical disc;
generating a reflective signal based on the scanning;
converting a duty cycle of the reflective signal into a radius value;
incrementing a DAC (digital to analog converter) count to a new DAC
count;
repeating the scanning, the generating, and the converting; and
calculating a fine actuator gain based on the DAC counts and the radius
values."

as recited in Claim 10 and incorporated into dependent Claims 11-14. Here again, the Office does not assert that these features are described by Bradshaw or Bruner. Bruner does not disclose, teach or suggest scanning an "optical disc" as recited in claim 10. The Office addresses this lack of teaching of the applied references by taking official notice, at pages 2- 4. Applicants respectfully submit that the taking of Official Notice is improper. None of the references teach or suggest "converting a duty cycle of the reflective signal into a radius value." US 4,720,754 is cited as allegedly disclosing a sawtooth reference pattern, but fails to disclose "scanning a sawtooth pattern on a non-data side of an optical disc" or "generating a reflective signal based on the scanning."

The allegation regarding obvious design choice to use either a known linear or sawtooth reference pattern is inapposite, since there is no allegation that either reference describes scanning a pattern on a non-data side of an optical disc or generating a reflective signal based on the scanning, or converting a duty cycle of the reflective signal into a radius value. Further the allegation of obvious design choice is precluded where, as here, the claimed subject matter and the function it performs is different from the prior art. See, e.g., In re Gal, 25 USPQ 2d 1076, 1078 (Fed.Cir. 1992). The allegation regarding criticality is without legal foundation.

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The rejection is the product of improper hindsight reconstruction, in an attempt to combine features of unrelated references based only on teachings of applicants' specification. Furthermore, the Examiner does not assert that the prior art teaches all elements of the claimed subject matter.

Claims 15-19:

The applied references also fail to teach or suggest:

" . . . generating a table of coordinate data by scanning a reference pattern on an optical disc; and

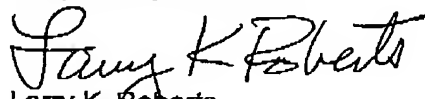
calibrating the gain of a fine actuator based on the table of coordinate data. "

as recited in Claim 15 and incorporated into dependent Claims 16-19. Similar considerations apply to Claim 15 as discussed above regarding Claim 1. Bruner does not disclose, teach or suggest scanning an "optical disc" as recited in claim 15.

Conclusion:

The final rejection should be withdrawn. Such favorable reconsideration is solicited.

Respectfully submitted,



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Dated: 4.20.2006

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